VIL TECH LABS
ed by NABL as per ISO/ IEC 17025 : 2005
# 5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com
T-2654

To,

Assistant Executive Engineer
Vidyaranyapura Sub Division,
BBMP.

02nd June 2015

Dear Sir,

**Sub:** Testing of Bituminous Concrete.

As requested, the required tests were carried out for the Bituminous Concrete samples supplied by you, for the work of **'Improvements to Main road and cross roads at Muniramaiah Colony in ward no.11, (Kuvempunagara) Vidyaranyapura Sub Division'.**

Please find the enclosed Test Report of the above.

**Thanking You,**
**For Civil Tech Labs**

CIVIL TECH LABS BANGALORE

**(KHUSHBOO L.)**
**Quality Manager**

# CIVIL TECH LABS

# 5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com


## TEST REPORT

### GRADATION TEST ON BITUMINOUS CONCRETE MIX GRADE - 2

| | |
|---|---|
| **Name & Address of the Customer** | AEE, Vidyaranyapura Sub Division, BBMP |
| **Name of Work** | Improvements to Main road and cross roads at Muniramaiah Colony in ward no. 11, (Kuvempunagara) Vidyaranyapura Sub Division. |
| **Name of Agency** | M/s. K. R. I. D. L. |
| **Date of Testing** | 02/06/2015 |
| **Technical Reference** | IS : 2386(Part I)–1963 (Reaffirmed 2011) |

| | Sample-1 | | |
|---|---|---|---|
| **IS Sieve Designation (mm)** | **% By Weight Passing IS Sieve as per MORTH (4th Revision) Table 500-18 for BC Grade-2** | **Actual % By Weight Passing IS Sieve** | **Remarks** |
| 19 | 100 | **100** | **Satisfies the requirements** |
| 13.2 | 79-100 | **97.2** | |
| 9.5 | 70-88 | **82.5** | |
| 4.75 | 53-71 | **63.5** | |
| 2.36 | 42-58 | **45.3** | |
| 1.18 | 34-48 | **38.7** | |
| 0.6 | 26-38 | **32.6** | |
| 0.3 | 18-28 | **22.5** | |
| 0.15 | 12-20 | **18.4** | |
| 0.075 | 4-10 | **7.8** | |

**Note:**

1. The results relate only to the items tested.
2. Report shall not be reproduced except in full, without the written approval of the lab.
3. Any correction invalidates this report.
4. The results are based on the test conducted on samples supplied by the customer.

Lab Incharge
Civil Tech Labs

CIVIL TECH LABS BANGALORE

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# TEST REPORT

## GRADATION TEST ON BITUMINOUS CONCRETE MIX GRADE - 2

| | |
|---|---|
| **Name & Address of the Customer** | AEE, Vidyaranyapura Sub Division, BBMP |
| **Name of Work** | Improvements to Main road and cross roads at Muniramaiah Colony in ward no. 11, (Kuvempunagara) Vidyaranyapura Sub Division. |
| **Name of Agency** | M/s. K. R. I. D. L. |
| **Date of Testing** | 02/06/2015 |
| **Technical Reference** | IS : 2386(Part I)–1963 (Reaffirmed 2011) |

| | Sample-2 | | |
|---|---|---|---|
| **IS Sieve Designation (mm)** | **% By Weight Passing IS Sieve as per MORTH (4th Revision) Table 500-18 for BC Grade-2** | **Actual % By Weight Passing IS Sieve** | **Remarks** |
| 19 | 100 | **100** | **Satisfies the requirements** |
| 13.2 | 79-100 | **96.8** | |
| 9.5 | 70-88 | **83.5** | |
| 4.75 | 53-71 | **63.5** | |
| 2.36 | 42-58 | **46.8** | |
| 1.18 | 34-48 | **37.4** | |
| 0.6 | 26-38 | **31.4** | |
| 0.3 | 18-28 | **21.8** | |
| 0.15 | 12-20 | **17.4** | |
| 0.075 | 4-10 | **8.5** | |

**Note:**

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Lab Incharge
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## TEST REPORT

**TEST ON DETERMINATION OF BITUMEN CONTENT ON BITUMINOUS CONCRETE MIX-GRADE 2**

| | |
|---|---|
| **Name & Address of the Customer** | AEE, Vidyaranyapura Sub Division, BBMP |
| **Name of Work** | Improvements to Main road and cross roads at Muniramaiah Colony in ward no. 11, (Kuvempunagara) Vidyaranyapura Sub Division. |
| **Name of Agency** | M/s. K. R. I. D. L. |
| **Date of Testing** | 02/06/2015 |

**A)**

| Sl. No. | Test | Test Method | Technical Reference |
|---|---|---|---|
| 1 | Extraction of mineral aggregate | **Test Method A (Centrifuge Method)** | **ASTM: D2172/ D2172M-11** |
| 2 | Determination of amount of mineral matter/fines in the extract | **Ashing Method** | |

**B)**

| **Specification: As Per MORTH (4th Revision) Table 500-18, Bitumen Content for BC Grade-2 is 5% to 7%** | | |
|---|---|---|
| **Sl. No.** | **Description** | **Values** |
| 1 | Weight of bituminous mixture before extraction test, **$W_1$ g** | **2000.00** |
| 2 | Weight of mineral aggregate obtained from centrifuge extractor, **$W_2$ g** | **1874.52** |
| 3 | Weight of mineral matter in the total volume of extract (by ashing), **$W_3$ g** | **13.43** |
| 4 | Total weight of aggregate in the bituminous mixture, **$W_4$ g = ($W_2$ +$W_3$) g** | **1887.95** |
| 5 | Total weight of Bitumen extracted from the mixture, **$W_5$ g = ($W_1$-$W_4$) g** | **112.05** |
| 6 | Bitumen content in %, **($W_5$/$W_1$) %** | **5.60** |

| | |
|---|---|
| **Remarks** | **Satisfies the requirement.** |

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Lab Incharge
Civil Tech Labs

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Accredited by NABL as per ISO/ IEC 17025 : 2005

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Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654


To,

Assistant Executive Engineer
Vidyaranyapura Sub Division,
BBMP.

04th May 2015

Dear Sir,

**Sub:** Testing of Wet Mix Macadam.

As requested, the required tests were carried out for Wet Mix Macadam samples supplied by you, for the work of **'Improvements to Main road and cross roads at Muniramaiah Colony in ward no. 11, (Kuvempunagara) Vidyaranyapura Sub Division.**
Please find the enclosed Test Report of the above.

**Thanking You,**
**For Civil Tech Labs**

Khushboo

CIVIL TECH LABS BANGALORE

**(KHUSHBOO L.)**
**Quality Manager**

# CIVIL TECH LABS

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## TEST REPORT

TEST ON WMM MIX

| | |
|---|---|
| **Name & Address of the Customer** | AEE, Vidyaranyapura Sub Division, BBMP |
| **Name of Work** | Improvements to Main road and cross roads at Muniramaiah Colony in ward no. 11, (Kuvempunagara) Vidyaranyapura Sub Division. |
| **Name of the Agency** | M/s. K. R. I. D. L. |
| **Date of Testing** | 04/05/2015 |
| **Reference** | MORTH Table 400-11 |

| IS Sieve Designation (mm) | % By Weight Passing IS Sieve | Actual % By Weight Passing IS Sieve | Remarks |
|---|---|---|---|
| 53 | 100 | 100 | **Satisfies Requirements** |
| 45 | 95-100 | 98.5 | |
| 22.4 | 60-80 | 73.4 | |
| 11.2 | 40-60 | 54.6 | |
| 4.75 | 25-40 | 35.1 | |
| 2.36 | 15-30 | 23.4 | |
| 0.6 | 8-22 | 16.2 | |
| 0.075 | 0-8 | 6.3 | |

**Note:**

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3.Any correction invalidates this report.

4.The results are based on the test conducted on samples supplied by the client.

CIVIL TECH LABS BANGALORE

Lab Incharge
Civil Tech Labs